

**Management Plan Review  
Scoping Mtg. Comment Issues  
December 8, 1998, W. Barnstable MA  
December 9, 1998, Gloucester, MA  
December 10, 1998, Boston, MA**

**General Comments**

The following comments are a compilation of issues raised at the three public Scoping meetings. The attendees were largely from the whale watching industry, the conservation community including NGO's, federal agencies, the academic community, and the general public. Agencies from the State of MA were represented. The MWRA was represented. A NE Fisheries Council representative attended. There were no commercial fishermen in attendance.

Relative to most of the following issues were concerns that information wasn't getting out. While many knew of the existence of the Sanctuary, many did not know what the Sanctuary was doing, or what it was supposed to be doing. Improving communications on multiple levels was a theme throughout the meetings. Further, concern was expressed that the public ability to assist in revising the management plan was inhibited by not knowing what has been accomplished. The general opinion was that the use of the Sanctuary is not well-documented, monitored, or regulated. Comments suggested that when the Sanctuary began people were connected to it but the relationship has diminished and it is important to reawaken commitment to the Bank. A comment was made that the Sanctuary should have prepared a 5 year report to be distributed prior to the scoping meetings indicating what has and has not been accomplished. It was also suggested that the Sanctuary be more proactive in making available any research data that is accumulated. This might include a formal set of presentations such as the whale watch ethics forum. It was felt that concentrating on public awareness and engagement will strengthen Sanctuary efforts to fulfill its' mandate..

Concerns were raised of what it means to be a Sanctuary. General opinion was that "sanctuary" generally connotes protection. The question was asked several times whether this was the vision for Stellwagen Bank and if so then stronger management effort must be directed towards conservation issues. Comments were made that perhaps the Sanctuary should think of itself as a 'park' with mitigation measures as a driving mandate including "ecological reserves" or "marine zoning". It was explained that this is not consistent with the enabling statute. The comment was then made that perhaps this concept might be used in a 5 - 10 year projection.

The Sanctuary management needs to review where and when it is appropriate to take a lead on an issue. The idea of short term management flexibility was supported as a way to adjust to situations that arise at short notice. The "coordinated" approach (with other agencies?) to management of activity is not well implemented nor understood. Conversation included discussion of whether and how Sanctuary management can influence agencies with dominant authority over a resource or activity. There are activities which the Sanctuary cannot directly regulate, for example, fisheries and international shipping transiting the Sanctuary. Should the Sanctuary management pursue Memo's of Agreement with other agencies? To argue this is justifiable or useful there must be solid data on the usage of the Sanctuary. It was expressed that the Sanctuary should expand the scope of its missions and take on significant problems including the concept of innovative no-take zones within the Sanctuary and addressing Fisheries as it appears that NMFS is not adequately fulfilling its mandate to protect fisheries resources. Sanctuary should use its resources to fulfill a mandate of protection.

The issue of whether the Sanctuary has the resources to achieve any of the public requests was also a consistent concern throughout the meetings. There was grave concern that the Sanctuary did not have the resources to 'get the answers' we need to understand how best to manage activity within the Sanctuary. There are significant scientific, economic, social, educational, communication efforts to be developed, maintained and monitored if the Sanctuary is going to achieve its mandate.

SAC representatives emphasized the importance of regular public input and indicated they were open to receiving comments and concerns about the Sanctuary, especially on the current topics identified as standing and impending issues. Specific topics raised in this comment were high speed vessels, boundary concerns, and the 'meaning' of the Sanctuary.

## 1: Education/ Outreach

- A. The public needs to know the Sanctuary exists and what it does and doesn't allow. The public perception is that the Sanctuary will protect itself regarding pressures (i.e. high speed vessels) so the Sanctuary needs to keep its role in view. For example, the channel 4 misreport of an Eg strike should have been actively corrected. The Sanctuary should have a spokesperson for these kinds of issues.
- B. Educational mandate of the Sanctuary needs clarifying.
  - Who is the audience?
  - How can it be improved?
- C. Does the Sanctuary have the resources to achieve its' mandate / goals?
- D. Given there are educational programs in place why and how are 'we' (the sanctuary) not getting the message out?
- E. Look to the book Cod by Kulansky (pg. 29) for an apropos comment on the importance of 'outreach.'
- F. How could the non-federal (NGO's) community be used to increase outreach?
  - 1. There is already a complement of naturalists out on WW boats there should be an easy way to use them to introduce the Sanctuary and it's resources.
  - 2. Coast Guard Auxiliary is already assisting, how to expand using them for outreach purposes?
  - 3. Land based outreach projects that introduce the Sanctuary?
    - (e.g., Trash collection at wharves, signage at wharves)
- G. Sanctuary should have a spokesperson to deal with the media.
- H. Outreach must be to non-typical audiences as well.
- I. Outreach/communication should be done by differing means depending on the audience. The Sustainable Seas project was raised as a national scale outreach project.
- J. Technology is changing how the sanctuary gets used by the public.
  - (consider tours to the bottom when the technology develops?)
- K....on the other hand concern was expressed that too much outreach would increase use of the sanctuary leading to overuse.
- L. The Sanctuary needs to expand its' focus of endangered animals from the Eg to Mn and Bp. These are indicator species of fluctuations in prey populations.

## 2: Ship Strikes of Whales and Whale Interactions

- A. Protection of cetaceans and especially Eg is critical.
- B. Need to keep monitoring the Eg use of "critical habitat" with a view of activity within and without the Sanctuary. These must not be separated from each other.
- C. Use of shipping lanes through the Sanctuary needs to be investigated carefully.
- D. There must be better understanding of acoustic impacts on whales by boat traffic; especially large vessels.
- E. Recommend alternative shipping routes. Designate clear specific lanes. Work in conjunction with other agencies to solve this problem.
- F. The Eg shipstrike team is looking to the sanctuary for help with protection efforts such as regulation of vessel traffic.
- G. There was concern over the possibility of high speed ferry services which would increase the numbers of boats and speed over the Sanctuary and other critical feeding grounds.
- H. Vessel speeds are a significant concern through the Sanctuary, especially where cetaceans are present.
- I. Look at the possible vessel modifications that might help avoid strike or prevent injury from a strike.
  - Use the National Academy of Science as a source of information for practical, technical solutions.

- J. The vessel concerns expressed in the Whale Watching section are also pertinent to any other commercial recreational vessel that enters the Sanctuary ( e.g., gambling / dinner cruises, etc.)
- K. Should it be the responsibility of a user of the Sanctuary to justify that their activity won't adversely affect the resource. For example, require a conservation plan, a monitoring plan and a risk assessment of the activity. Users should pay for their own management .

### 3: Whale Watching Specifically

- A. This is an area where the Sanctuary management should take a leadership role in answering unknowns.
- B. Concern was expressed that the whale watching industry could increase to a point where it overruns the resource.
- C. The WW boat companies that attended the meetings requested that any regulations be undertaken with input from the industry. They requested a 'balanced' approach to any management scheme and indicated their willingness to work with the Sanctuary management to create such a scheme. They expressed their concern over avoiding ship strikes and interference with the animals. They offered platforms for observers and supported greater educational efforts for Captains and naturalists.
- C. Assessing any issue around marine mammals must incorporate the 'Precautionary Principle' (see Lisbon Principles). There needs to be a shift in the paradigm of how and for what purpose are vessels interacting with marine mammals being managed. The starting line must now be the conduct of the vessel within proximity to a marine mammal; the necessity to avoid collision; and what and when is a behavioural interference.
1. How do we minimize risk of collision?
  2. What are the cumulative effects of vessel activity on marine mammals.
  3. When is there a behavioural disturbance?
  4. What role does acoustics (engine noise, etc.) play in that?
  5. When is there too much vessel activity?
  6. Sanctuary management should consider having parts of the Bank off limits.  
(e.g., timed area closures; permanently closed areas)
  7. Sanctuary management should consider a dynamic management system that protects the animals as they move with their prey.
  8. Sanctuary management should consider temporal restrictions; no night whale watching  
(e.g., dusk/evening is feeding time, boat activity should be minimized).
- E. Concerns about vessel speeds and the use of high speed vessels were expressed. Generally commercial WW boats favored vessel speed restrictions but emphasized enforcement was critical.
- F. Enforcement of 'guidelines' was a concern.
1. Is there a self-checking mechanism for commercial boats to remind themselves of the guidelines?
  2. Should these voluntary guidelines become regulations?
  3. How to enforce the guidelines.
  4. Should there be some limit on the number of WW boats allowed until better information can be gathered regarding impacts on the animals?
- G. There is no regulation nor guidelines nor enforcement where private recreational boaters are concerned. This can be a significant issue in years where whales are plentiful and many private boats are shadowing the whale watch fleet. Education of recreational boaters is essential but also needed is the fear factor of enforcement. Cameras on WW boats etc. are effective enforcement tools.
- H. The commercial whale watch boats feel they are easy targets for unsubstantiated complaints as they are identifiable. They are concerned with inequitable enforcement.
- I. Management should consider the possibilities of permits for vessels using the sanctuary. Revenue from permits would mitigate cost of enforcement and educational outreach regarding vessel concerns.
- J. Certification of WW Captains and Naturalists.
- K. Look at the possible vessel modifications that might help avoid strike or prevent injury from a strike.  
Use the National Academy of Science as a source of information for practical, technical solutions.
- L. Should it be the responsibility of any ship using the Sanctuary to justify that their activity won't adversely affect the resource. In the case of WW vessels they might volunteer to fund studies on impact of their industry. Or license the WW boats using the Sanctuary and include in the licensing process a protocol

which will minimize risk to the animal. This license could create a presumption in favor of the WW boat should there be an enforcement action against them.

#### **4: Research**

- A. The Sanctuary management should take a leadership role in identifying, developing, expanding, and monitoring research efforts in the Sanctuary.
- B. Sanctuary Management should take a leadership role in acoustics research. Baseline data is available. Effort should be spent on vessel design to mitigate acoustic signatures.
- D. Consider the possibility of the Sanctuary as a 'seed' site. Use the Sanctuary as an area to repopulate species. "Farm" the ocean?
- E. A major part of Sanctuary research should be towards creating a safety zone for wildlife. The sanctuary must be managed for other than commercial interests. There needs to be a shift in paradigm to institutionalize management for precaution with marine life and ocean water quality.
- F. Comment suggested that there should be an effort to correlate point sources on land to the sanctuary water quality over an extended period of years. Other agencies should be asked to contribute to this effort.

#### **5. Marine Zoning**

- A. The sanctuary should investigate the idea of marine zoning. See FKNMS; models from New Zealand and Australia. Possible break down of zones might include:
  - 1. no use
  - 2. no extraction
  - 3. no fishing with mobile gear; or gear that creates bottom destruction
  - 4. research only
  - 5. zoning of water column
- B. Sanctuary should take leadership role in creating a marine zoning experiment.
- C. Work with Fisheries Council to create a model
- D. Zoning should include whole range of activity not only no-take zones
- E. For safety issues, need to be careful when zoning to consider issues affecting navigation (sea, wind, weather etc.) Include emergency exceptions?
- F. Become a 'biopump' that may help preserve diversity and rebuild fish stocks in adjacent waters.
- G. Recognize the implications of 'international waters' and the zoning impact on barges. Also the issues around the shipping industry and navigation with IMO relationship to regulating international traffic.

#### **6: Fishing Activity**

- A. The effects of fishing gear on the seafloor and on resources have not been sufficiently researched. Current evidence is generally anecdotal.
- B. An important role for the Sanctuary is to sponsor research within the Sanctuary to study and monitor impacts.
- C. Sanctuary should also take on the role of stimulating research within other agencies.
- D. NMFS is not adequately doing its job in protecting fisheries resources.
- E. Ban gillnetting in Sanctuary; make fishing whale and dolphin safe

#### **7: Mariculture Activities**

- A: Confusion was expressed as to whether mariculture was allowed or not. Brad explained there had been one research permit given to study the issue. However, the research was never done.
- B. The suggestion was made that mariculture activity might be investigated as a replenishment tool.
- C. There were also comments saying do not allow mariculture as the environmental effects are unknown and need to be better understood before allowing this in the sanctuary.

## 8: MWRA/ Discharge and Water Quality

- A. What effect will MWRA outfall pipe have on the Sanctuary?
  - Must study process for outfall
  - Must have a Baseline Assessment and careful, consistent monitoring;  
who provides this: MWRA or SBNMS?
  - Current NMS regulations prohibit discharges from entering and injuring Sanctuary resources/qualities.
- B. Outfall pipe / secondary treatment goes on line late summer 1999
- C. MWRA says they have 7 years of baseline data and will continue to monitor near field sites (at outfall site) as well as 2 far field sites in Cape Cod Bay. There is a contingency plan in place to react to water quality issues.
- D. The NPDES permit process creates a new science advisory panel created to be independent of past research.
- E. Question was raised of where do you draw the line between who monitors for whether there is 'entry and injury'; should it be MWRA or the Sanctuary? Issues expressed were in terms of scope, hydrodynamic models, where do you draw the line of where monitoring should leave off. Also the issue was raised of whose responsibility is it to manage things that are less causally related to discharge. Should NMS take a stronger position on this regarding the 'enter and injure' provisions?
- F. Comment suggested that there should be an effort to correlate point sources on land to the sanctuary water quality over an extended period of years.
- G. Concern was expressed that there should also be monitoring of over bottom sediment contamination

## 9: Boundaries (see also SAC White paper)

- A. The boundaries of the Sanctuary should be extended to incorporate Jeffrey's Ledge and Scantum's Basin.
- B. The current boundary incorporates a sliver of the ledge and was apparently an arbitrary cut off point.
- C. Expansion of the boundary would essentially double the size of the sanctuary.
- D. The full inclusion of Jeffrey's Ledge is appropriate because it incorporates important marine mammal feeding territory as well as spawning and feeding territory for herring.
- E. The area supports considerable numbers of Mn and Bp and there are indications it may be an important fall-winter feeding ground for Eg.
- F. There is an interchange/ interdependency between Jeffrey's and Stellwagen by at least some of the feeding whales found on Stellwagen. This was evidenced between 1990 and 1995 when the population of sand lance on Stellwagen declined and many individually identified humpback whales were then found to be feeding on Jeffrey's Ledge.
- G. Jeffrey's Ledge is susceptible to the same pressures as Stellwagen including issues of contaminant outflow from the Merrimack River and issues of shipping lane traffic.
- H. As fishing effort shifts due to declined stocks and closures there may be a temptation to look to other species. Herring represent one such temptation. Herring stocks are not well understood. Increased herring fishing effort may have untold effects on the Jeffrey's Ledge ecosystem including displacement of feeding animals, entanglement concerns, and unknown effects on herring spawning.
- I. It was recognized that should Jeffrey's be included in the Sanctuary the current management scope is insufficient to protect resources that use both habitats. Also there may be issues unique to Jeffrey's that would require a change in the scope of the current management mandate.
- J. It was also recognized that there would likely be severe backlash from fisheries at the idea of an expansion of the Sanctuary boundaries. The presumed argument from fishermen being that Sanctuary management would be another regulatory overlay on an industry already under considerable regulatory weight.
- K. Parts of the boundaries of the Sanctuary abut state ocean sanctuaries. Sanctuary management should be in close contact with the state to create a smooth regulatory interface.
- L. Sanctuary management should also be assessing whether there are other areas that would expand the diversity of habitat within the sanctuary and consider incorporating those.
- M. Expansion should be based on whether there are the resources to protect and not through giving away political concessions or compromises whereby management can't protect the new area and its resources.

## **10: Enforcement**

- A. Enforcement concerns were also a general theme throughout the meetings. The likelihood of any regulation being adhered to without an enforcement presence is very unlikely.
- B. Vessel speeds are a significant concern through the Sanctuary, especially where cetaceans are present.
- C. Enforcement of WW 'guidelines' was a concern. Should these voluntary guidelines become regulations?
- D. What new vessels may be using the Sanctuary and how to enforce regulations of those?  
(e.g., high speed ferry; gambling / dinner cruises; night time excursions)
- E. Discharge regulations are not being adequately enforced. (head materials are often observed).
- F. There was concern that often enforcers don't know what they are enforcing.
- G. There was concern that the approach distance rule could not be adequately enforced. Also, the issue was raised of when the incident arises when the whale comes to the boat. There was concern expressed that a boat might get cited in such a situation when the boat has done nothing wrong.

## **11: Installation of Submerged Cable or Pipeline**

- A. This has not yet been an active issue.
- B. Existing regulations are appropriate regarding this issue. Prohibition should continue.
- C. If the boundary is extended to include Jeffrey's Ledge this issue may arise due to a pipeline being proposed that will carry natural gas from Nova Scotia.

**Management Plan Review  
Written Public Comment Issues  
January, 1999**

**Mark Percival, Gloucester MA** (attended Gloucester meeting)  
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- 1: Concept of Sanctuary should be protective habitat for marine life. Human activities should be secondary to this.
- 2: Require that pleasure boats using the Sanctuary be 'licensed' or 'permitted' with an educational aspect involved the permitting process. A fee should be charged for the permit.
- 3: Monitor ocean and Sanctuary conditions through on-going research.
- 4: Be more firm with regulating human activity and have enforcement capabilities.

**Stephen Gersh, Essex MA** (attended Gloucester meeting)  
sgersh@cove.com

- 1: Lack of ability to enforce 'rules of the road' within the Sanctuary is very serious issue.
- 2: Define regulatory or guideline terms (i.e. excessive speed) and create the ability to enforce these.
- 3: Expand the boundaries to include Jeffreys Ledge because it is an active feeding ground for marine mammals.
4. If the primary purpose of the Sanctuary is resource protection then human activity must take second place when creating a management or regulatory scheme.
5. To realistically protect marine mammals impose regulations, enforcement (including stiff fines) with especial attention on small private boats. License or permit users of the Sanctuary. Eliminate nighttime whale watches
6. Must be greater follow-through on expectations, regulations, etc. Heavily post 'rules of the road', or regulations.
7. Monitor any discharge activity that might reach Sanctuary, including land based non-point source pollution.

**Jim Stewart, NEA Envtl Affairs Coordinator, Lowell MA** (attended Gloucester meeting)  
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**General comments:**

Sanctuary should view itself as conservation based, protective of habitat and marine life. Use of the sanctuary by humans should not negatively impact marine life or habitat. Currently the Sanctuary is doing too much 'balancing' whereby human activities have too prevalent a role. Welfare of the marine life must be the higher priority.

Create 'no-take' zones within the Sanctuary where no commercial or recreational activity is allowed.

Biggest challenge the Sanctuary management faces is political winds.

Post information such as scoping meetings in multiple places so more know when and where the event will occur. Very few people ever look at the Federal Register for dates etc.

#### **1: Education**

#### **2: Ship Strikes of Whales**

Eliminate shipstrikes through narrowing shipping channels and create a functional tracking system of whales in that channel. Evaluate new tracking or sounding technology (passive sonar, modified ship design).

#### **3: Whale Watching**

Boat speed limits are important, especially in feeding areas. Increase the approach to whales perimeter to 100 yards for marine mammals except for Eg which should increase to 500 feet.

#### **4: Research**

#### **5: Fishing Activity**

Ban destructive fishing practices such as bottom trawling within the Sanctuary. Should these practices be allowed then maintain a zone within the sanctuary of similar habitat where no such activity is allowed that can provide a standard for research and monitoring. This should be considered a strict biological preserve.

#### **6: Mariculture Activities**

#### **7: MWRA**

#### **8: Boundaries**

Expand the boundaries of the Sanctuary to include Jeffreys Ledge and feeding habitat to the north. This is an active feeding ground for marine mammals. Of special significance to considering a boundary expansion is the fact that Eg use north of the ledge for feeding. As they are critically endangered it is appropriate to protect and monitor this habitat.

#### **9: Enforcement**

Functional enforcement is essential to the success of meeting Sanctuary goals. A stronger enforcement presence within the Sanctuary is necessary, especially on summer weekends. Consider a Sanctuary usage fee to support enforcement efforts, monitoring efforts, educational outreach. Consider creative enforcement alternatives such as using a dirigible, observers on WW platforms and/or Coast Guard auxiliary armed with range finders and handheld radios.

**IFAW, Yarmouth Port MA** (attended Gloucester meeting)  
cclose@ifaw.org (Cynthia Close)

#### **1: Education**



A: Develop strategies for stewardship including education about the Sanctuary, interpretation and promotion of the Sanctuary to increase public awareness and to communicate the importance of Sanctuary resources and the issues of impacts on the Sanctuary resources. This may be achieved by:

- 1) product development
- 2) community involvement through interactive programs.
- 3) establish a knowledgeable volunteer base to assist in disseminating information
- 4) establish good working relationships with conservation groups to 'spread the word' to more audiences.

B: Public involvement requires special attention. Sanctuary management needs to make greater effort to engage those who will be most impacted by a management plan. This will include fishing communities and conservation groups. Increased educational outreach will enable productive participatory decision making.

## **2: Ship Strikes of Whales**

A: Continuing research on this issue is critical. A baseline of information and ongoing monitoring is critical to determining management strategies for routing of ship traffic and attendant regulations (i.e. speed limits).

B: Sanctuary Management should continue to work with the Northeast Implementation Team on these issues.

## **3: Whale Watching**

A: There are too many vessels (commercial and private) to depend on voluntary compliance with whale watching guidelines.

B: A detailed review of the guidelines is necessary. This should include a review of what a reasonable approach distance is, safe procedures around animals and speed restrictions. This discussion should also include consideration of a 'permit' or 'certification' program for whale watchers approaching or in the Sanctuary.

C: An increased educational effort is required to inform the public about whale habitat and conservation measures relative to protecting these animals.

D: Any review of guidelines must include discussion of the ability to enforce compliance. And the outcome of these discussions must provide maximum protection for the whales in the Sanctuary.

E: The new regime must be in place by the start of the whale watching season of 2000.

## **4: Research**

A: Research into the health and status of the Sanctuary is critical. The Sanctuary management must better understand critical attributes of habitat for marine life in the Sanctuary. Included in this is the recognition that many migratory species require a variety of habitats and will only be protected through a web of conservation efforts. To achieve the Sanctuary Management must continue efforts to engage in partnerships to achieve research goals and insights.

B: Research priorities should include:

1. monitoring and assessment of ecosystem health.
2. monitoring and assessment of Sanctuary activities including cumulative short and long term impacts of fishing and whale watching activities.
3. Partnership studies should be pursued between scientists and fishermen

4. Research of how to mitigate human impact on endangered species should include acoustic and telemetric studies.

#### **5: Fishing Activity**

A. Sanctuary should not engage in their own fisheries regulations. NE FMC is the appropriate forum for this

B. Sanctuary should work with fishing communities to address all management issues and fully include their voice in the discussions on Sanctuary management.

#### **6: Mariculture Activities**

A: There should be no permitting of mariculture operations near or within the Sanctuary. Concerns include water quality issues, entanglement issues, private commercial use of Federal waters.

#### **7: MWRA**

A. The impacts on habitat and marine life of the outfall from the MWRA project must be monitored. A priority should be to establish a baseline food web study and contaminants load study.

B. Baseline information should be publicly accessible and regularly reviewed.

C. Other point and non-point source discharges should be monitored to identify the source of any contaminants that adversely impact the Sanctuary habitats.

#### **8: Boundaries**

A. Extend the boundaries to include significant feeding areas and a variety of habitats. Jeffrey's Ledge should be fully incorporated into the Sanctuary.

**Sharon Young, Humane Society of the U.S.** (attended Barnstable meeting)

#### **1: Education**

Outreach efforts to the communities interested in the Sanctuary (i.e. fishing communities, environmental groups, educational groups, recreational boaters, commercial tourist boats, etc.) are critical to responsible use of the sanctuary. Use environmental and educational groups to help achieve sanctuary goals.

Target these groups for advanced notice of hearings, meetings, initiatives (observer program, coast guard auxiliary) etc. or be consistent and thorough with where such information is posted (website calendar?). Perhaps develop a monthly / bi-monthly newsletter sent to parties interested in Sanctuary activities (press, WW companies, local schools, fishing interests, marinas, etc.).

#### **2: Ship Strikes of Whales**

see Whale watching

#### **3: Whale Watching**

Increased traffic of private and commercial WW boats of great concern as is introduction of high speed vessels. Concerns are ship-strikes, speed restrictions, (no wake within a mile of animals), certification of captains and naturalists, and of the public using the sanctuary.

Naturalist training is important, but development of training process must include stakeholders (WW companies, etc.).

#### **4: Research**

#### **5: Fishing Activity**

Should there be a fisheries restrictions that appear to be coming from the management of the Sanctuary, ignoring promises made during the hearings leading to the establishment of the Sanctuary, there may be a decline in support of the Sanctuary's efforts. Prior commitments to the fishing community may preclude restrictions other than that of NE FMC.

#### **6: Mariculture Activities**

Mariculture activities should not be allowed within the Sanctuary due to water quality issues and entanglement concerns.

#### **7: MWRA**

#### **8: Boundaries**

Boundaries of the Sanctuary should be expanded to include Jeffrey's Ledge. This is a high use area for feeding by marine mammals.

Tom Powers, MWRA, Central Lab, Sewage Division Deer Island, Winthrop (attended Boston mtg)  
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#### **7: MWRA**

MWRA does not believe the outfall pipe will create any significant issues for Sanctuary protection. NPDES permitting process for the outfall requires an extensive monitoring program and contingency plan. This will be the opportunity for the scientific community and public to offer input into the proposed plan and express concerns of impact on the Sanctuary from the outfall pipe.

Reviews of the expected discharge and envtl studies have been undertaken within the framework of the NPDES process. Previous reviews done by NMFS, EPA, MEPA, DEP, DMF, CZM. These reviews support the above conclusion that the outfall will not negatively impact the SBNMS.

MWRA has 6 years of baseline monitoring data and has undertaken computer modeling of MA Bay/Cape Cod ecosystem. These indicate outfall will be virtually undetectable at SBNMS Boundary. Draft of NPDES permit includes a 'near field' Ambient Monitoring Plan which is designed to detect significant deviations. This is the best protection of the SBNMS from impacts caused by outfall. The draft NPDES requires a contingency plan to react to significant deviations.

MWRA expects final permit to include a process where MWRA annually reports to SBNMS regarding discharge effects on the Sanctuary.

Elliott Norse, Marine Conservation Biology Institute, Redmond WA

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**1: Education**

**2: Ship Strikes of Whales**

**3: Whale Watching**

Whale watching is meant to be a non-consumptive use of the Sanctuary. However, recent shipstrikes, increased noise levels from increased boat traffic, and issues of approach to the animals may be creating increased pressures on Marine mammals. Sanctuary management should establish strong clear enforceable rules governing WW.

**4: Research and zoning**

Sanctuary should be used as 'test bed' for innovative management strategies. develop zoning schemes for within Sanctuary and without in surrounding waters. Included must be no-take zones. Multiple benefits to these zones include protection for breeding, spawning, nursery or feeding habitat, enhanced fish stocks in surrounding waters, maintaining or restoring natural biotic communities.

No-take zones will also enhance understanding of ecosystem functions.

**5: Fishing Activity**

Trawling, dredging and similar methods using mobile gear creates long term and profound disturbance to seabed. It reduces biological diversity and habitat complexity by destroying the structure of the ecosystem. Where trawling is frequent the seabed has no time to recover.

To mitigate this damage there must be no-trawl and no-dredge zones within the sanctuary.

**6: Mariculture Activities**

Not all research is appropriate for Sanctuary. The benefits of the Sanctuary for research are due to their status as natural systems. Artificial systems such as mariculture is not appropriate in this natural setting. there is too great a potential for serious environmental impacts on the natural system.

**7: MWRA**

**8: Boundaries**

**Les Watling, Darling Marine Ctr, UMaine**

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**General Comments**

SBNMS should follow the model of National Parks wherein there are no extractive activities. Otherwise calling the Sanctuary a sanctuary is ridiculous. If this is not politically workable at the very minimum there should be conservation zones that cover all habitat types represented in the Sanctuary. The logical role for the Sanctuary is to function as just that with defined areas undisturbed by human activity.

Sanctuary management of human interactions with whales must have the priority of eliminating, or at least minimizing, detrimental encounters between the two.

Dr. Robert Stevenson, Professor, Dept. of Biology, UMassBoston  
robert.stevenson@umb.edu

### **General Comments**

Establish a clear vision to maintain ecological integrity of the sanctuary. What would a healthy ecosystem have for species and species densities? General goals for conservation strategies have been identified (see Noss, 1992)

"1. represent in a system of protected areas all native ecosystem types and seral stages across their natural range of variation.

2. Maintain viable populations of all native species in natural patterns of abundance and distribution.

3. Maintain ecological and evolutionary processes, such as disturbance regimes, hydrological processes, nutrient cycles, and biotic interactions, including predation.

4. Design and manage the system to be responsive to short-term and long-term environmental change and to maintain the evolutionary potential of lineages."

Marine ecosystems have large and important pelagic and migratory components. Despite the advantages of Marine Protected Areas they alone will not protect biodiversity, ecological integrity or goods and services of ocean ecosystems. The Sanctuary management must work with others in the Gulf of Maine and along the entire Atlantic Coast to establish a coherent system of reserves.

For a successful management of the sanctuary there must be an adaptive management program for monitoring and managing. Use the Lisbon Principles of ocean governance as a measure to set management objectives by.

The following are specific actions that should be included in the mngmnt plan review:

#### **1: Education**

"In the end we will conserve only what we love; we will love only what we understand; we will understand only what we are taught" (Baba Dioum)

Education outreach must expand both through the local communities and through primary and secondary school programs. Scientists need to play a more active role in communicating the importance of natural systems.

#### **2: Ship Strikes of Whales**

#### **3: Whale Watching**

#### **4: Research**

#### **5: Fishing Activity**

There should be a moratorium of commercial fishing for five years. Regulation of fishing within the sanctuary should encompass no take marine protected zones.

#### **6: Mariculture Activities**

Mariculture activities should be forbidden until there is much better understanding of the ecological stresses that will occur within a habitat/ecosystem due to mariculture activities. When

assessing impacts of general and specific mariculture activity within the sanctuary the Precautionary Principal (see Lisbon Principles) must be used.

**7: MWRA**

**8: Boundaries**

Extend boundaries to include Jeffrey's Ledge; more of Cape Cod Bay; into shore in at least 2 places (recommendation: 1) tip of Cape Cod which is already part of National Seashore and around on the inner cape to the Audubon Sanctuary in Well fleet; 2) Great Salt marsh which extends from Gloucester north to southern NH which includes Plum Island and the Federal Wildlife refuge. The justification for extending boundaries is to provide ecosystem protection where human disturbance is minimal. This will provide areas where ecosystem goods and services can function with minimal stresses from human activity. There is documentation of the severe degradation of coastal and benthic habitats, of pollution in coastal waters; and of the fishing crisis. Expanding the boundaries will provide sites for recovery of species and protection of feeding habitat.

**9: Enforcement**

**Debbie Graham, MA Dept Env'tl Mngmnt**

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**1: Education**

A public presence on the sanctuary will be an asset to protection efforts as it promotes education.

**2: Ship Strikes of Whales**

**3: Whale Watching**

Whale watching is an important means by which to educate the public about the sanctuary and thereby enhance protection efforts.

**4: Research**

**5: Fishing Activity**

**6: Mariculture Activities**

**7: MWRA**

**8: Boundaries**

**9: Enforcement**

DEM supports the comments of having a greater enforcement presence in the Sanctuary and believes this can be largely achieved by continued and enhanced educational efforts.

**Lawrence Cahoon, UNC**

cahoon@uncwil.edu

**General Comments**

**1: Education**

**2: Ship Strikes of Whales**

**3: Whale Watching**

**4: Research**

## **5: Fishing Activity**

The current trawl exclusion zone covers only a corner of the Bank and that with a sandy bottom. While the best plan would exclude all trawl activity, this is politically unlikely. However, included in the no disturbance zones should be a larger block of the sanctuary which includes cobble bottoms. There should be a representative and contiguous set of bottom habitats protected from disturbance. There has been damage from trawl activity which might be remedied by allowing areas of hard substrate to recolonize.

## **6: Mariculture Activities**

## **7: MWRA**

## **8: Boundaries**

## **9: Enforcement**

**Darrell Briggs,**

darrell.briggs@digital.com

## **General Comments**

In reorganizing the management plan there must be consideration of better control of usage and resources, particularly the impact from commercial fishing.

To achieve the best plan for multiple users the new plan must be a clear statement of goals, rules, regulations and enforcement.

**Jamie Fargo Baillett**

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## **General Comments**

Strong support of the Sanctuary designation.

## **1: Education**

## **2: Ship Strikes of Whales**

The load of ship traffic through the sanctuary requires a quick and conservative review to whale mortality through ship strikes. There also must be strict oversight of the speed and activities of all commercial whaling boats.

## **3: Whale Watching**

## **4: Research**

## **5: Fishing Activity**

## **6: Mariculture Activities**

## **7: MWRA**

Agency overseeing the outfall should work with sanctuary management to implement a 'scientific project' regarding the effects of the outfall.

## **8: Boundaries**

The Sanctuary should be enlarged to an area inclusive of various habitats so more open ocean ecosystems will be recognized and protected.

## **9: Enforcement**

**Bays Legal Fund Board of Trustees / Wayne Bergeron, Chair**  
c/o Cape Cod Commission

### **General Comments**

BLF was established by Barnstable Cty to monitor MWRA discharge and Cape Cod Bay water quality concerns.

- 1: Education**
- 2: Ship Strikes of Whales**
- 3: Whale Watching**
- 4: Research**
- 5: Fishing Activity**
- 6: Mariculture Activities**

## **7: MWRA**

The Sanctuary should include specific recommendations in the revised Management Plan regarding MWRA discharge.

BLF supports Sanctuary comments submitted on the draft NPDES permit including:

- language protective of the water quality of the Sanctuary
- the need for adequate monitoring and contingency planning

MWRA draft NPDES permit requires MWRA to establish a food web model to ensure monitoring will identify possible changes in trophic levels due to MWRA discharge.

BLF advocates expanded monitoring by MWRA to include far field sites and additional temporal sampling at existing stations to account for seasonal variations. This will ensure the collection of sufficient baseline data to protect water quality and endangered species.

SBNMS revised Management Plan should include statements calling for a proactive approach to monitoring and contingency planning by MWRA before discharge is known or shown to cause adverse affects.

Specific recommendations should include:

- calling for creation and continued development of a food web model
- calling for statistically significant adequate monitoring both near and far field
- calling for more responsive contingency planning
- calling for the immediate discharge from outfall back into Boston Harbor if the Sanctuary experiences any level of degradation.

Stellwagen Sanctuary should name a member and an alternate to ensure regular participation on the Inter Agency Advisory Committee advising EPA or relative regulatory issues.



Sanctuary management should establish regular communications with BLF regarding water quality issues in the Bays.

**8: Boundaries**

**9: Enforcement**